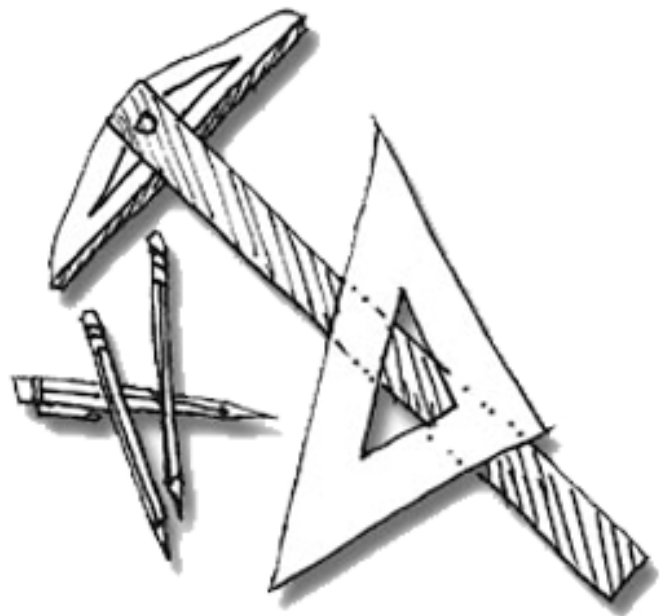
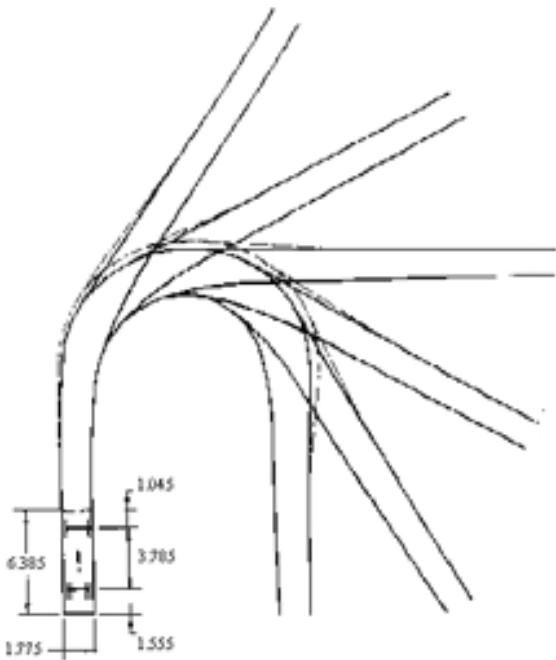
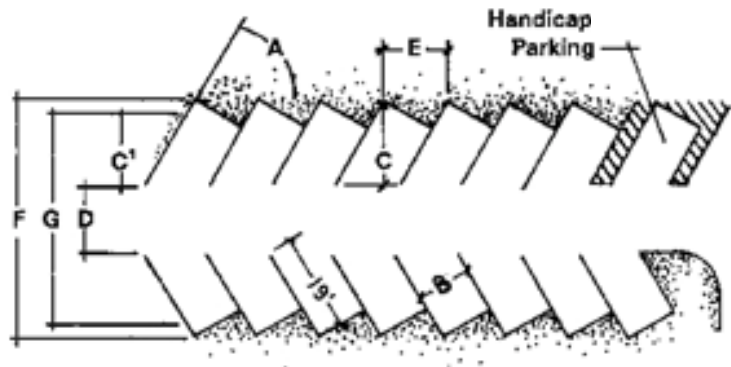


SITE PLAN REVIEW GUIDELINES



Department of Planning
City of Baltimore

June 10, 2005



Martin O'Malley
Mayor



Otis Rolley III
Director

Baltimore City's Site Plan Review Guidelines

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Baltimore City's Site Plan Review Guidelines

1.0 PRE-DEVELOPMENT PLAN REVIEW

For new construction projects or major renovation projects that involve significant additions or changes to the site plan, the Department of Planning coordinates most of the review process prior to the permit stage.

The Planning Department encourages all developers and/or property owners, experienced or inexperienced, to meet with staff before undertaking a major development or renovation project. At this Pre-Development Meeting, Planning staff will review the development process for a specific project. Prior to the meeting, developers should complete a pre-development submittal form which includes basic information about the project and property.

If the developer has a preliminary development plan, they may waive the pre-development meeting and proceed directly to Site Plan Review.

Pre-Development submittal forms are available on [website](#) or by contacting the *Site Plan Review Chairperson* at 410-396-4488.

To schedule a Pre-Development meeting, contact **410-396-4488 or 410-396-4264**.

2.0 INTRODUCTION TO SITE PLAN REVIEW

Pursuant to Article VII of the City Charter, the Planning Commission is required to review and deny/approve or amend proposed development plans. The Site Plan Review Committee, which is chaired by the Department of Planning, reviews and makes recommendations to the Planning Commission for development plans accompanying building permit applications, subdivision and development plans, residential developments (other than single family and semi-detached dwellings), commercial and institutional developments, renovations, and parking lots.

3.0 DEFINITION

Site Plan Review is the systematic assessment of land development proposals for consistency with land development policies and regulations and accepted land design practices.

4.0 PURPOSE

The Site Plan Review Committee provides recommendations on site plans to ensure that proposed development complies with the Baltimore City Zoning Code, Subdivision Rules and Regulations, Building Codes, and other commonly accepted planning, transportation and institutional guidelines and requirements. The committee also provides recommendations to ensure safe, functional,

efficient and orderly development with high standards of design. In general, the purpose of the Site Plan Review Process is to:

- Protect public safety, health and welfare;
- Minimize adverse effects upon pedestrian and vehicular traffic;
- Ensure the design is safe, efficient, environmentally sound, aesthetically responsive, and protects properties in the immediate vicinity and the general public;
- Ensure compliance with the Master Plan, Zoning Ordinance, and other documents that may control the development;
- Provide a consistent and uniform method of review.

5.0 SCOPE

Site Plan Review focuses on review of the proposed projects within the applicable property boundary, but also includes review of the proposed project's impact on neighboring properties, roadways and access points. The Site Plan Review Committee advises applicants regarding required dimensions of public roads and the public rights-of-way, but these requirements are ultimately determined through a developer's agreement process.

6.0 PREREQUISITE TO BUILDING PERMITS

Approval of a site plan is a necessary prerequisite to the building permitting process for land use for, which the site plan review is required. Applicants who are required, but fail, to receive final site plan approval will not be able to receive building permits from Planning Department. Applicants are required to come back to the site plan review committee for another review if the final site plan is changed or altered.

7.0 APPLICABILITY

Any new developments or building and site changes and subdivisions must be reviewed by the Site Plan review Committee and receive approval recommendations. Residential subdivisions less than three may not be required to receive Site Plan Review Committee approval. Site plan review is not required for construction or alteration of an individual single-family or two dwelling units. Proposed developments that meet one or more of the following applicability criteria shall be reviewed through the site plan review process.

- a) New Construction that involves any of the following:
 - i. All types of developments with full or phasing projects;
 - ii. Projects with multiple principal structures on one lot;
 - iii. Any multiple family residential or loft developments;
 - iv. Condominium developments;
 - v. Projects in a 100 Year Flood Plain;
 - vi. Projects within the 1000 feet buffer Critical Area;
- b) Additions and/or major structural alterations that involve any of the following:

- i. Developments with or above 600 square feet of gross floor area in cumulative total;
- ii. An addition to an existing building containing more than 600 square feet of gross floor area;
- iii. Projects in a 100 Year Flood Plain area;
- iv. Projects within the 1000 feet buffer Critical Area;
- c) Any development with a lot area of more than one (1) acre in cumulative total (considering existing lot area and any proposed additional lot area;
- d) Substantial change within any building;
- e) Any conditional, controlled, or regulated land use; any case before the Board of Municipal & Zoning Appeals as the body of first jurisdiction;
- f) Any use having drive-up/drive-thru facilities or walk-up component;
- g) Development signage;
- h) Subdivisions and development plans having three or more units.

8.0 PARTICIPANTS AND ISSUES

The Site Plan Review Committee review consists of representatives and issues addressed by the following City departments:

- **Department of Housing and Community Development:** focuses on conformity with the Baltimore City Zoning and Building Codes.
- **Fire Department:** focuses on plans conformity with fire safety requirements and standards including fire access routes and fire protection.
- **Department of Transportation:** focuses on traffic, circulation, parking, and loading requirements and standards.
- **Department of Planning:** focuses on conformity with the Baltimore City Comprehensive Plan, applicable downtown, urban renewal and neighborhood plans; subdivision requirements; applicable Planned Unit Developments; ordinances; State Forest Conservation and Critical Area ordinances; historic districts and zoning.
- **Parking Authority:** reviews proposals for off street surface lots and garage parking.

9.0 SUBMISSION REQUIREMENTS

- Site plans shall be prepared by an architect or engineer and drawn to scale at either **1" = 20'** or **1" = 40'**, if the site is less than 3 acres, and **1"= 100'** if the site is 3 acres or more. The sheet size, unless otherwise approved, shall be a minimum of **24' X 36"**. (See attached sample site plan)
- Each set shall be **stapled together, labeled and folded to 8.5" X 14"**. **Rolled plans will not be accepted for processing, and plans should not be individually folded.** It is the developer/property owner or agent's responsibility to assemble plans provided by the various consultants.
- The following elements shall be included in the Site Plan Review application package:

- five sets of site plans including existing conditions;
- one set of landscape and grading plans;
- one set of elevations;
- one set of colored presentation drawings or electronic PDF files (if required by the Planning Department); and
- a project description to include:
 - Overall description of the project in detail;
 - Existing and proposed use groups for existing and proposed structures;
 - Building descriptions in terms of building code construction type;
 - Copies of completed applications and/or permits for all applicable state, federal, or county agencies, including, but not limited to wetlands;
 - Anticipated volume of truck traffic and anticipated size of trucks regularly servicing the premises, for adequacy of turning radius on site; and
 - Other statements as may be specified by the reviewing body.
- Preliminary Environmental Assessment, if necessary;
- Any baseline environmental assessment or preliminary environmental assessment that may have been prepared for the subject site;
- Traffic Impact Study, as provided for in Site Plan Review Guidelines if required, that analyzes safety and efficiency of access, adequacy of driveways and internal road systems, and impact on external roads.

9.1 Background

Cover Sheet with:

- Index of drawings;
- Legal description with land area in square feet or acres. In case of a multiple-family dwelling site plan, the net usable square feet or acres of land area shall also be shown; and
- Location map to scale showing:
 - (a) Site location;
 - (b) Current zoning designation of project area and properties adjacent and across any alley; and
 - (c) Major roads and railroads.

Existing Conditions: The site plan shall contain the following information:

- Seal and signature of land surveyor who prepared the drawing. Land surveyor must be licensed in the State of Maryland;
- North arrow, legend, if applicable, with graphic and written scale;
- Existing topography based on City of Baltimore datum with spot elevations extending to public rights-of-way adjacent to the site;

- Street and road names for all public rights-of-way or private roads, and existing on-site and off-site driveways located within one hundred (100) feet of property boundaries;
- Locations and boundaries of wetlands;
- Locations of all lakes, streams, rivers, creeks, brooks, ponds, detention basins, and drainage ways, including intermittent streams and ponds with ordinary high water marks indicated;
- Location of individual or stands of trees;
- Existing utilities including water mains, sanitary sewer mains, and storm sewer, cable, electric, gas, and telephone, including easements; and
- Location and use of all existing structures on subject parcel and all structures within two hundred (200) feet of subject parcel.

Proposed Site Plan

Title Block with:

- Project name;
- Contact information, including name, address and telephone number.
- Owner's name and telephone number;
- Name and address, telephone number, and seal with signature of architect, engineer, designer, or planner who prepared the site plan;
- Specific address or addresses of the lot(s). Lots should include block and lot numbers. A street address is preferred;
- Date the plan was originally prepared and date of each revision;
- A north arrow. The plan should be oriented with north at the top. A **vicinity map**, drawn to scale at either 1" = 500' or 1" = 1000', and located at the north end of the site plan. **General notes and building statistics** should be provided immediately under the vicinity map. (See attached sample site plan)

9.2 Consistency with existing plans and requirements

- City Comprehensive Plan
- Urban Renewal Plan Ordinance, if applicable
- Strategic Neighborhood Action Plan, if applicable
- Planned Unit Development Ordinance, if applicable
- Downtown Plans, if applicable
- Historic District (local, state or national) or Landmark Status if applicable

Applicants shall determine and document that the proposed plan conforms with applicable plans and does not conflict with the standards and requirements of applicable plans.

9.3 Land Use

- Property zoning. If a zoning change is proposed, show both the existing and proposed zoning district. For assistance with zoning matters, contact Eric Tiso at 410-396-8358;
- Total lot area;
- Property lines and dimensions for all lots. If property lines are proposed to change, either through subdivision or reconfiguration of lots, label existing and proposed property lines. For assistance with subdivision matters, contact Ervin McDaniel at 410 -396-4264.
- Location and size (dimensions and number of stories where appropriate) of existing and proposed improvements, such as buildings, additions, walls, fences, tanks (above and below ground), paving (specify type), planters, porches, bay windows, or other similar projections;
- Current and proposed uses of buildings on the site;
- Type of construction and footprint of buildings;
- For industrial and commercial uses: proposed gross floor leasable area;
- For residential uses or mixed-use buildings: permitted and proposed number of units; density calculations; amenity area, size of units, number of units by number of bedrooms, typical floor plans.

The Committee will consider the following questions:

- How does the plan affect the surrounding area?
- How does the plan affect adjacent land uses?
- How does the plan affect other neighborhood issues?
- Is all or any part of dedicated for any public uses?

9.4 Circulation

- Distance between the site and nearest intersecting streets;
- Location and dimensions of existing and proposed streets and alleys;
- Location and dimensions of streets or alleys which the developer proposes to close or build above;
- Location, dimensions, and names of streets and alleys adjacent to the site. This information may be obtained from the Department of Public Works at 410-396-3631;
- Location of bus stops and/or rail stations, on-site and within ½ mile of the site. This information may be obtained from the Mass Transit Administration of Maryland;
- Location and dimensions of sidewalks, alleys, footways, and public easements;
- Street trees, bus shelters, fire hydrants (existing and proposed);

- The width and location of existing and proposed driveways for ingress and egress, including labels for directions (i.e., entrance and exit). Location and width of curb cuts on the site and on the block;
- Location and dimensions of fire lanes and access routes.
- Easements and right-of-way on the property and dedicated or to-be-dedicated easements or public roadways.

The committee will consider the following questions:

- Is the proposed vehicular and pedestrian traffic circulation system compatible with and connected to the existing circulation system?
- Is intersection capacity adequate?
- Does the plan need to include provisions for a new arterial or collectors to handle increased traffic?
- Is there a need to separate the movement of goods from people?
- Is there a need to separate vehicular and pedestrian access?
- Does the plan give the location and dimensions of sidewalks?
- Does the plan provide for adequate sight distance?
- Is the site design adequate for maneuvering for police and fire equipment?
- If the plan is for a site that is within ½ mile of a public transit stop, is there an attempt to connect or orient the site towards transit? Does it provide direct pedestrian routes to transit? Does it provide bicycle amenities?

9.5 Parking

- Required and proposed number of parking spaces, including breakdown for visitor handicap spaces;
- Location of on street parking, including metered parking;
- Location, layout, and dimensions of parking lot(s). Indicate the total number of spaces on each lot, dimensions of parking spaces and aisles. Identify designated van accessible and regular handicap spaces;
- Proposed bike rack locations;
- Exact use of the lot – such as parking for customers, employees, public parking, storage of cars, used or new car lots;
- Assignment of tenant parking spaces to specific units, where applicable.

The committee will also seek to answer the following questions:

- Does the site plan adequately address parking needs?
- Are parking needs mitigated by the presence of transit?

9.6 Loading

- Locations & dimensions of all loading and trash collection areas;
- Loading dock & dumpster screening details, if outside;

The Committee will also look to answer the following question:

- Do the site plan provide adequate truck loading zones or areas, and/or off street refuse storage and removal areas?

9.7 Urban Design

Building Elevations and Floor Plans shall indicate the following general information:

- (a) General design concept of the appearance of proposed construction or alterations and the proposed construction materials for all façades of each building, and the proposed color(s) for all façades of each building;
- (b) Building height; floor plans;
- (c) Buildings in Historical Districts are specified in CHAP'S guidelines;
- (d) Elevations of structures:
 - Label building materials and colors;
 - Show location of doors, windows, loading areas, wall signs/bands, air conditioning, exhaust vents, roof top mechanical equipment (type and height and screening), wall lighting.
- (e) Architectural Plans:
 - **Residential Use:** Show floor plans for each unit type, including unit sizes; show floor plan for each floor, including underground garages;
 - **Industrial Use:** Show warehouse, plant, office, mezzanine, and retail areas;
 - **Commercial Use:** Show retail, office, storage areas;
 - **Church Use:** Show meeting rooms, offices, kitchen area, assembly areas, storage, classrooms;
 - **School Use:** Show classrooms, assembly areas, storage, offices, and portable classrooms;
 - **All uses:** Show internal dumpster areas;
- (f) Required and proposed front, rear, and side yard setbacks;
- (g) Permitted and proposed lot coverage;
- (h) Building footprints and orientation;
- (i) Principal entrance of buildings; entrances of individual units;
- (j) Details of fencing, including location, dimensions, materials;
- (k) Details of lighting, including type (poles, wall mounted, or other) and location;
- (l) Location and dimension of play areas and outdoor amenities; and
- (m) Signage details. (Note: Signage details are requested for preliminary review by planning staff. However, this does not suggest that signs are approved as part of site plan approval. For assistance, call 410-396-4107.

9.8 Historic Preservation

New construction and renovation of existing buildings in historic districts are required to comply with at least the following requirements.

- New Additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing size, scale, and architectural features to protect the historic integrity of the property and its environment;
- New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired;
- For detailed requirements refer to the CHAP'S Historic Preservation Guidelines;

9.9 Environment

- Grade and/or topography to indicate slope and drainage;
- Chesapeake Bay Critical Area Boundary and 100 foot buffer, if applicable; For assistance with Critical Areas, call 410-396-5902.
- Stormwater management. For assistance with stormwater management, call 410-396-5902;
- Forest Conservation - If the project disturbs 20,000 square feet of land or greater, or requires a subdivision of a lot 20,000 square feet or greater, the applicant must submit a Forest Stand Delineation and Forest Conservation Plan. For details see Article 7, Division IV, City Code, Forest and Tree Conservation. For assistance with Forest Conservation, call 410-396-4369;
- Floodplain boundaries on or near the site. If the property is in or near a floodplain area, the precise elevation of proposed development must be noted. For assistance with floodplains, call 410-396-4718;
- Landscaping plan. The Landscaping Plan may be included as part of the Chesapeake Bay Critical Area Program or Forest Conservation, if applicable. For assistance with landscaping plans, call 410-396-4369.

The committee will look at the following issues when reviewing the landscape plan:

- Does the plan minimize paving?
- Does the plan change the existing terrain?
- How does the site landscaping and design relate to the surrounding land uses?

10.0 REVIEW PROCESS

- Applicants must submit a Pre-development submittal form prior to the Pre-development meeting.

- The Site Plan Review Committee meets every Wednesday morning (Tuesday when Wednesday is a holiday);
- To schedule a review, contact Wolde Ararsa at 410-396-4488.
- Application packages must be delivered to the Planning Department by noon on the Friday before the scheduled review. For information on what is to be included in the application package; (see section 9.0)
- The Planning Department will distribute the application packages to the other City Departments;
- At the conclusion of the Site Plan Review Committee meeting, the Committee Chair will inform the applicant whether a follow-up Site Plan Review is necessary and if so, what revisions are required, or if the applicant may proceed to the next step.

10.1 Flow Chart

A pre-development Plan review meeting at the Department of Planning to determine type of application/acceptance of the submissions and to outline the development review process. Call 410-396-4488 or 410-396-4264.
After the pre-development Plan review meeting, applicants must schedule an appointment with the Site Plan Review Committee. Applicants submit the required plans to the Department of Planning– Site Plan Review Committee Chairperson for distribution.
Department of Planning circulates site plan to Site Plan Review Committee members.
Departments submit comments to Department of Planning Site Plan Review Committee Chair prior to the Site Plan Review Committee Meeting.
At the Site Plan Review Committee Meeting, the applicant will receive comments from the Committee. If changes are minor, adjustments are made at the meeting. If changes are major, plans must be re-submitted and another review is scheduled.
Site Plan Review Committee Chairperson prepares minutes to reflect comments provided at the Site Plan Review meeting and disseminates to participants.
If the proposed plan is accepted, the applicant may move to the next step,

which varies depending on the type of application. The proposed plan may require approval by the Planning Commission., the Commission for Historical and Architectural Preservation, the Urban Design and Architecture Review Panel, City Council, and BMZA.

NOTE: BUILDING PERMITS WILL ONLY BE ISSUED UPON COMPLIANCE WITH CONDITIONS OF SITE PLAN REVIEW AND THE SATISFACTION OF REVIEWING AGENCIES.

11.0 APPROVAL TIME LIMITS

Unless otherwise noted in the conditions of approval, Site Plan approval expires one year from the date of approval. Extensions may be requested prior to expiration. A letter outlining the reasons for the delay and anticipated schedule is required to request an extension. The Department of Planning will present the request to the Site Plan Review Committee to determine if there are any required modifications. Extensions may be granted for one year.

12.0 DEVELOPMENT GUIDELINES AND STANDARDS

12.1 Consistency with Existing Plans

12.1.1 Planned Unit Development

The Planned Unit Development (PUD) is a development tool used for large or complex projects that may not be feasible under existing zoning. PUDs are intended to encourage the best possible site plan and design. The PUD may include:

- Land uses
- Site Plan
- Setbacks
- Lot Coverage
- Open space
- Landscaping
- Parking
- Density and/or FAR
- Elevations

For detailed PUD requirements, see Title 9 of the Baltimore City Zoning Code. A PUD may only be established by local ordinance. Prior to the process of establishing the PUD, the applicant must attend the Pre-development meeting, contact the surrounding community associations,

and contact the council person who would introduce the bill. The following is the process for a PUD:

- Step 1: Pre-petition Conference
- Step 2: City Council Introduction – 1st Reader
- Step 3: Agency Review
- Step 4: Planning Commission Hearing
- Step 5: City Council Public Hearing
- Step 6: City Council 2nd Reader
- Step 7: City Council Passage: 3rd Reader
- Step 8: Mayor's signature. A bill becomes an ordinance once this step is completed.

12.1.2 Urban Renewal Plans

The Urban Renewal Plan is a development tool for addressing blight and encouraging revitalization. An Urban Renewal Area is established by local ordinance. Urban Renewal Plans may include authorization to acquire property, development standards, land disposition controls, and other related standards. Urban Renewal Plans also often provide for changes in zoning, land use regulations, and urban design guidelines.

The Comprehensive Planning Division initiates the process with a study to determine the need to establish or amend an Urban Renewal Plan. The appropriate comprehensive planner works closely with the affected community groups throughout the planning process.

Prior to beginning the development process in an Urban Renewal Area, developers should contact the appropriate comprehensive planner. The Commissioner of the Department of Housing and Community Development is authorized to make the final decisions regarding interpretations of the renewal standards.

12.1.3 Local Historic Districts and Landmarks

The Commission for Historical and Architectural Preservation (CHAP) designates local historic districts or landmarks as having particular historical or architectural significance. Local historic districts or landmarks are established by local ordinance.

In local historic districts, CHAP all reviews rehabilitation and exterior painting or refinishing, alteration, new construction, and demolition. The work and materials reviewed by CHAP include paint color, restoration of cornices and other decorative architectural features, window and door replacement, erection of fences and walls, reconstruction of porches and staircases, and similar types of exterior work. CHAP does not deal with

interior renovations unless they affect the exterior character of the building.

CHAP must issue a “notice to proceed” before a building permit may be issued for any exterior work or interior work that may affect the exterior. Maps of the historic districts, information about specific buildings, and application forms are available from CHAP. CHAP requires plans and samples of paint or other materials proposed for exterior work.

Local historic districts:

- Auchentroly Terrace
- Bancroft Park
- Barclay- Greenmount
- Better Waverly
- Bolton Hill
- Butchers Hill
- Dickeyville
- Eutaw Place/Madison Avenue
- Franklinton
- Hunting Ridge
- Jonestown
- Loft District
- Madison Park
- Mill Hill
- Mount Washington
- Mount Royal Terrace
- Mount Vernon
- Oldtown Mall
- Otterbein
- Perlman Place
- Rail Road
- Ridgley's Delight
- Seton Hill
- Stirling Street
- Ten Hills
- Union Square
- Upton's Marble Hill
- Washington Hill
- Waverly

In addition, there are National Register Historic Districts and individual landmark buildings in Baltimore City. CHAP does not review proposed changes to the exterior or interior of National Register buildings unless the owner applies for a Baltimore City Historic Rehabilitation Tax Credit. However, the Maryland Historic Trust may need to review work in these

areas or on these buildings if any state or federal funds are involved. For more information see the CHAP Guidelines.

12.2 Circulation

12.2.1 Traffic Impact Study

A traffic impact study should be done for new development and redevelopment projects in the following situations:

Residential	100 dwelling units or more
Warehousing	150,000 square feet or more (gross floor area)
All other projects	50,000 square feet or more or projects that would generate 100 vehicle trips or more per hour in peak hours

Pre-existing studies should be updated.

12.2.2 Sidewalks

- a) Sidewalks should be unobstructed and a minimum of 5 feet wide. Where there is heavy pedestrian traffic, 8 feet wide, unobstructed sidewalks should be maintained.
- b) Wherever there is a tree pit on a sidewalk, a tree grate must be installed to maintain the minimum sidewalk width. Tree pits must be at least 4 feet x 6 feet.
- c) Sidewalks should be provided on both sides of the street.
- d) Walkways should make appropriate connections between building entrances, public walks, parking, and amenity areas.
- e) Maximum ramp slope is 1:12. Refer to the Baltimore City Building Code for handrails or guards.
- f) Large developments shall provide pedestrian link to public areas/facilities and adjacent lands as appropriate. Design the walkway to accommodate pedestrians, car overhangs, tree planting, lights, trashcans, and bike racks.
- g) Mid-block handicapped ramp or crosswalks for pedestrian access are not allowed.
- h) Buffers between pedestrians and motor vehicle traffic are important to provide greater levels of comfort, security, and safety to pedestrians. The ideal width of a planting strip is 6 feet. Minimum allowable landscape buffer widths are 2 to 4 feet for local or collector streets and 4 to 6 feet for major or arterial streets. With a landscaped buffer, care must be taken to insure that bus stops and other drop off zones have connections

to the sidewalks. Where landscaped buffers cannot be provided due to site constraints, on street parking, bike lanes, or extra sidewalks should be provided.

12.2.3 Roadways

- a) Lane width should be 10 feet minimum (recommended for turn lanes) and 12 feet maximum. Acceptable running lane width is 11 feet. However, engineering judgment should be applied where wider lanes are needed.
- b) A one-way roadway with no parking should be a minimum width of 16 feet (so that traffic can pass a disabled vehicle).
- c) A one-way roadway with parking on one side should be a minimum of 20 feet.
- d) A two-way roadway with parking on one side should be a minimum of 26 feet.
- e) A two-way roadway with parking on both sides should be a minimum of 34 feet.
- f) The right-of-way for residential local public or private streets is a minimum of 40 feet with a case-by-case review.
- g) In areas where tractor-trailers are expected, intersections should accommodate the turning requirements for tractor-trailers.
- h) In other areas, intersections should accommodate the minimum turning requirements for SU-30 trucks.

12.2.4 Alleys

- a) The minimum width for alleys is 16 feet in residential areas and 20 feet in commercial and industrial areas.
- b) For more design requirements, see Highway design standard BC-500.II.

12.2.5 Cul-de-Sacs

- a) A minimum outside radius of 40 feet is recommended for residential areas; 45' for commercial and industrial areas. The right-of-way radius is a minimum of 55 feet.
- b) When an island is planned for the center of the cul-de-sac, the curb radius of the island should be 15 feet.
- c) The approach radius shall be 45 feet.
- d) Approach roadway should be minimum 30 feet wide.
- e) Only parallel parking is permitted around cul-de-sacs.
- f) A cul-de-sac should not be longer than 500 feet from the closest intersecting public street.

- g) A cul-de-sac should generally be considered only in conjunction with local residential streets.
- h) For more requirements, see highway design standard BC-500.21.

12.2.6 "T" Turn-Arounds

- a) A "T" turn-around may be used in place of a cul-de-sac if warranted by special considerations.
- b) The length of the turn-around (or "T" portion) shall equal the width of the right-of-way.
- c) For more requirements, see highway design standard BC-500.22.

12.2.7 Traffic Islands

- a) A traffic island formed by a turning roadway at a channeled intersection is generally triangular in shape. Islands must be a minimum of 50 square feet, but preferably at least 75 square feet.
- b) An island shall be raised by a standard curb or combination curb and gutter, 8" in height.
- c) An island less than 300 square feet in area shall be paved using 5 inches thick concrete sidewalk or brick. If brick is used, it shall be laid in a basket weave or herringbone pattern.
- d) An island greater than 300 square feet in area shall be seeded or sodded and include sidewalk construction and handicapped accessibility, where required.

12.2.8 Median Islands

- a) A median island is desirable in conjunction with major arterial streets and some minor collector streets. A median of sufficient width will provide safe operation between opposing traffic streams, minimize headlight glare, provide space for safe operation of crossing and turning vehicles, act as a refuge for pedestrians, and permit appropriate landscaping.
- b) The general range of median width on urban arterials and highways is from a desirable dimension of 25 feet or more to a minimum of 4 feet.
- c) The minimum desirable dimension for a median with a left-turn lane is 16 feet (12 feet for the lane and 4 feet for the median). In the reconstruction of an existing street, where

space is at a premium, the minimum width is 12 feet (10 feet for the land and 2 feet for the median).

- d) Medians 25 feet or less in width shall be raised and delineated by a standard curb or combinations curb and gutter 8 inches in height.
- e) The Department of Transportation, Traffic Engineering Division must review and approve median breaks.

12.2.9 Circles

A traffic circle is a raised island placed at four-way intersections. They are mostly used on residential streets and are intended to reduce the speed of traffic. They can be installed individually or in a series. Circles must be spaced at least 600 feet to 1000 feet apart to maintain a reasonable speed throughout the street. Four-way stop signs can also serve this purpose.

12.2.10 Driveway and Access Design

- a) When driveways cross sidewalks, it is necessary to maintain a sidewalk level across the driveway of no more than 2 percent side slope. The sidewalk material (usually concrete) should be maintained across the driveway as well.
- b) Commercial driveways should be a minimum of 30 feet wide for two-way and 17 feet for one-way (inside curb dimension). (Note: The Fire Department may require 18 feet or, if the driveway also serves as a fire access route, 20 feet).
- c) Driveways for residential developments should be a minimum of 24 feet wide for two-way and 17 feet for one-way (inside curb dimension). (Note: The Fire Department may require 18' or, if the driveway also serves as a fire access route, 20 feet). Individual residential dwelling unit driveways can be 8-10 feet wide.
- d) Monumental driveways (driveways divided by a median) should be 18 feet wide minimum and 35 feet wide maximum for each direction. Median width should be 6 feet minimum and 18 feet maximum, with a 6 feet curb height.
- e) Driveways should be located a minimum of 40 feet from the Point of Intersection or 25 feet from the tangent of the curb radius at intersections. This means that the corner clearance is a minimum of 25 feet, but the desirable minimum is 40 feet.
- f) Driveways should be located 7.5 feet from the property line and 15 feet from an adjacent driveway.
- g) Apron driveways, which are recommended for residential developments, should be flared by 2 feet on each side for turning movements.

- h) Driveways for heavy truck use are commonly curb circles with handicap ramps.
- i) Driveways shall be paved from the curb line to the right-of-way line using 7 inches plain cement concrete pavement for a typical driveway and class P for a heavy volume driveway or heavy truck traffic driveway.
- j) The maximum allowable grade for a driveway is 11%; however, 6% is a desirable maximum for commercial, office, industrial, and dense residential uses.
- k) All driveway designs with access onto City-owned roadways must conform to the Baltimore City, Department of Transportation, Highway Division Book of highway design standards, sections 501 and 502.
- l) Site obstructions such as parking meters, street lights, trees, shrubs, signal equipment, berms, grades, crests, one-way signs, day light restrictions, or other items in the public right-of-way or adjacent to the driveway preclude approval of driveways or curb cuts.
- m) Curb cuts for driveways require curb cut permits from the Department of Public Works and review by the Department of Transportation and Department of Planning.

Driveway	Radius	width
Residential (apron)	10 feet	8-10 feet
Business, One-way	10 feet	17-18 feet
Business, Two-way	15 feet	30-36 feet
Industrial	25-30 feet	35-40 feet

12.2.11 Fire Access and Fire Hydrants

- a) Fire access routes should be provided to the building face with the principal entrance and any additional building face (required) facing a street, under the Baltimore City Building Code.
- b) Fire access routes should have clear width of 20 feet and connect to a public thoroughfare.
- c) Fire access routes should have a centerline turning radius of not less than 40 feet (minimum inside radius of 34 feet).
- d) Fire access route signs should be posted on both sides of the building.
- e) A turn-around facility should be provided for any dead-end fire access route that is over 295 feet in length.
- f) Overhead clearance should be at least 16.5 feet.

- g) Hydrants should be located within 295 feet of any portion of the building perimeter that is required to face a street under the Baltimore City Building Code.
- h) If possible, hydrants should be placed at least 40 feet from the building face and not obscured by plantings.

12.3 Parking

12.3.1 Space Dimensions

- a) Parking spaces must be at least 180 square feet (9 feet by 20 feet).
- b) Parallel parking spaces must be 8 feet by 22 feet. Unobstructed end spaces may be reduced from 22 feet long to 18 feet.
- c) For parallel parking, the stall width must be increased by 3 feet when a space is parallel to a wall, column, fence, or hedge.
- d) For perpendicular parking, when the use of a parking space is limited on one or both sides by a wall or column, the stall width must be increased by one foot for each obstructed side.
- e) Vehicle overhangs of 3 feet maximum may be allowed as part of stall length as long as the spaces do not abut a Fire Access Route and the overhang does not encroach on landscape strips or sidewalks.
- f) Handicapped ramps should be provided in parking lots and garages, and on street corners and in all areas where accessibility is required.
- g) No front parking is allowed by the zoning code of Baltimore City for all residential units on all zoning districts. Parking pads and driveways should be placed on the side of the dwelling units where the parking pad should be behind the building line.

12.3.2 Angle Parking Dimensions

Degree	Type	Module	Aisle	St.L	S.W.P.I.	St.W	St.D
30	Single	28'	10'	18'	17'	9'	20'
	Double	48'	12'	18'	17'	9'	20'
45	Single	30'	12'	18'	12'	9'	20'
	Double	48'	12'	18'	12'	9'	20'
60	Single	37'	18'	19'	10'	9'	20'
	Double	57'	18'	19'	10'	9'	20'
75	Single	39'	20'	19'	10'	9'	20'
	Double	59'	20'	19'	10'	9'	20'
90	Single	40'	20'	20'	9'	9'	20'
	Double	60'	20'	20'	9'	9'	20'

Note: St.L = Stall Length; S.W.P.I. = Stall width perpendicular to isle;
St.W. = Stall width; St. D. = Stall depth

12.3.3 Surface Lots

- a) Provide curbed end islands adjacent to the main driveways of commercial sites. The end islands should be a minimum of 5 feet wide, and they should be 5 feet shorter than parking stalls.
- b) Island landscaping must be a maximum of 23 inches high.
- c) Curbs or bumpers of concrete, wood, or an approved type of metal must be no more than 6 inches high and 8 inches wide, and they must have a minimum distance of 4 feet from the property line (fence or wall). The distance may be reduced to 2 feet where parking spaces are parallel to a barrier or a fence.
- d) Curbs that serve as wheel stops should not exceed 8 inches in height.
- e) Provide adequate snow storage space at the corner end of parking lots. Snow storage shall not obstruct sight distance or damage landscaping.
- f) Parking lots must be a dustless surface or paved with concrete, macadam, asphalt, brick, or stone block. The paving shall be able to support the design loads for the proposed vehicular traffic.
- g) Surface drainage must not flow across an adjoining property line or sidewalk except at driveways to a public street, paved alley, or other approved watercourse.
- h) Sanitary facilities must be provided where an attendant is needed.
- i) If a double-loaded parking aisle is a dead-end, 10 feet deep by 20 feet wide "T" turn-around should be provided.

12.3.4 Garages

- a) The layout of parking aisles and stalls is similar to that used for surface lots. Stall and aisle dimensions generally remain the same, except that the aisle is sometimes narrowed slightly. Variations from the surface parking lot dimensions are subject to review and acceptance by the Site Plan Review Committee.
- b) Ramp grades, dimensions, and column placement affect circulation. Section 406.8 of the Baltimore City Building Code states that the maximum vehicular ramp slope shall not exceed 12.5% or 1 vertical unit for every 8 horizontal units (1:8). Driving ramps should be 14 feet to 18 feet wide with 12 feet sufficient for straight runs.
- c) For 60-degree parking, sloping floor grades should not exceed 4% to 5% to minimize the possibility of vehicles rolling out of

- the parking space and down the ramp. For 90-degree parking, sloping floor grades should not exceed 6%.
- d) Structural columns must be setback 2 feet on both sides of the driving aisle to provide for 24 feet clear aisles (face of column to face of column).
- e) A 20 feet long flat landing pad area is required at the top of ramps. Appropriate transition grades are required at the top and bottom of ramps.
- f) Vertical clearance should be at least 7 feet, which normally results in floor-to-floor heights of about 10 feet. Handicap van accessible spaces must have a minimum vertical clearance of 8.2 feet (98 inches), but preferably 9 feet.
- g) Parking garages with control gates must have at least 3 stacking spaces (66 feet) before the gates at the entrance.
- h) Sanitary facilities must be provided where an attendant is needed.

12.3.5 Handicapped Spaces

- a) One handicapped space is required for every 25 spaces.
- b) Number of spaces is calculated lot by lot.
- c) Handicapped spaces must be 8 feet wide, with a 5 feet buffer for car spaces and an 8 feet buffer for van spaces.
- d) Handicapped spaces may not have more than 2% grade.
- e) For more information, see American with Disabilities Act- Accessibility Guidelines web site address: <http://www.access-board.gov>

12.3.6 Recessed On-Street Parking/Drop-Off

A 2 feet radius is used at the outer edge of the protrusion and no radius is needed at the inner edge, since this area is protected and may be needed for maneuvering. A 75-degree angle on the curb prevents the parker from confusing the alignment for anything other than what it is: recessed parallel parking.

12.3.7 Drive Through Stacking Spaces

Drive-through lanes should be a minimum of 9 feet wide.

Use	Spaces Required
Bank	10-spaces/single lane
Fast Food	10-spaces/single lane
Prescription Pick-Up	4-spaces/single lane
Car Wash	10-spaces/single lane

12.4 Loading

12.4.1 Loading Docks

- a) For residential buildings with more than five units, provide convenient loading/moving spaces.
- b) For non-residential developments, provide on-site loading and unloading areas.
- c) Internal truck circulation shall not interfere with automobile or pedestrian movements on the public right-of-way. Accommodate all movements on-site.
- d) The loading dock shall function without interference with parking spaces or access to parking spaces.
- e) Rear access for deliveries and services is strongly preferred. Only as a last resort and after review by the Site Plan Review Committee is front or side delivery access allowed. Sidewalk or curb loading may be used as an auxiliary method.
- f) Truck parking or loading dock dimensions:
 - o Berth width: 10 feet
 - o Clearance: 14 feet
 - o Length: 39 – 60 feet or more, depending on the size of truck and angle of the loading dock. The maneuvering length must be double the length of the trailer.

12.4.2 Trash Handling

- a) All perishable waste must be stored within the main building in a climate-controlled environment. The City also recommends use of compactors.
- b) Garbage storage areas should be outlined on floor plans.
- c) If dry refuse is proposed to be stored outside, it shall be enclosed with masonry walls and board-on-board opaque gates.
- d) For multiple residential sites, applicants must identify whether private haulers or the City will handle trash pick-up.

12.5 Urban Design

Urban design principles are incorporated into the Baltimore City Comprehensive Plan. Each development proposal will be reviewed to determine whether it meets these guidelines.

12.5.1 Principles of Urban Design

Urban design involves subjective matters related to the visual character, aesthetics and compatibility of land use and the qualitative aspects of development. The tangible elements of urban form, the built environment,

and open space shall be designed in an efficient and attractive manner to enhance the well-being of residents and reflect the Plan's vision.

12.5.2 Objectives of Urban Design

- Preserve, enhance, and connect natural features (e.g., waterfronts, water courses, the Inner Harbor promenade, steep slopes).
- Preserve, enhance, and restore historically significant features.
- Integrate new communities with the natural setting and provide a diverse social setting that is well served by public transit and is pedestrian-friendly.
- Ensure consistency, compatibility, and quality of the built environment.

12.5.3 Policies

- The density, form, bulk, height, setbacks, spacing, materials, landscaping and fencing, should be compatible with the immediate area, particularly residential uses adjacent to non-residential uses.
- Building design must recognize pedestrian scale, safety, access, and preservation of public views.
- The streetscape environment should be harmonious.
- Convenient access for people with disabilities should be provided to transit and parking.
- Parking areas should be designed to minimize visual impact and should include landscaped islands and screening.
- Buildings on arterial and major arterial roads and collector streets shall present their main building facades to these roads or enhance their treatment to avoid blank building walls.
- Reverse frontage lots and use of acoustical walls along streets are discouraged.
- Minimize building setbacks along pedestrian and transit-oriented streets.
- For projects with multiple family dwelling units, locate parking areas internally.
- Minimize the functional and visual impacts of site servicing, loading, air conditioning, ventilation, and garbage facilities on streets and residential areas through site design and screening.

12.5.4 Garage Townhouses

- a) Front garaged townhouses will only be allowed where the site and the development absolutely have no way of providing parking on the side or the rear of the proposed town houses. Planning staff will evaluate the project case by case.

- b) Where possible, access to parking pads or garages must be from the rear of the property. This may require widening of the alley to a minimum of 16 feet (20 feet width is preferred).
- c) The garage structure should be set back a desirable minimum of 20 feet, but not less than 5 feet, from the back edge of the public sidewalk to assure that a motorist backing out of a garage can see a pedestrian before the rear of the vehicle intrudes upon the public sidewalk.
- d) The street should be wide enough to maintain any existing street parking on the opposite side of the development.
- e) Townhouse driveways should be paired, where possible, with an expansion joint.
- f) Non-paired driveways may not encroach on the sidewalk of adjacent properties.
- g) Non-contiguous driveways should have raised curbs and sidewalks between the driveways.
- h) The perspectives of the residents of the street and the neighborhood associations are to be taken into account.
- i) In situations where developers cannot meet the above criteria, requests for exceptions may be considered.

12.5.5 Gated Communities/Guard Houses

- Gates designed to block or obstruct vehicular passage on public or private streets have the potential to have the potential to create a queue of cars and impede the free flow of traffic, including emergency, fire and police vehicles. The Department of Planning discourages gating of streets which provide access to residential developments.

12.5.6 Lighting

- Proposed lighting should not negatively impact surrounding residential neighborhoods.

12.6 Environment

Certain types of projects require environmental review:

12.6.1 Stormwater Management, Erosion and Sediment Control

- Certain development projects, depending on the nature and size, may require an approved stormwater management and sediment and erosion control plan. These plans must be reviewed and approved by the City's Department of Public Works before a building permit is issued. Projects within the City's Critical Area Overlay Zoning District

must meet both the 10% phosphorous reduction stormwater quality rule and additional quality requirements. For more requirements applicants must contact the Planning Department Environmental Planners. At a minimum redevelopment projects should:

- Reduce impervious surface by 20%;
- Treat that equivalent run-off in Best Management Practice (BMP, swale, pond, sand filter, planting STMP ;and
- Pay offset fee.

12.6.2 Typical Conservation Requirements

- In regulated areas, permits are required for buildings, structures, headwalls, culverts, sewers, utilities, roads, trails, parking lots, bridges, placing fill, grading, and re-contouring in a creek block, below the top-of-bank, and in a floodplain.
- Top-of-bank setbacks are typically 25 feet. All parking and driveways must be set back a minimum of 25 feet from the limit of a creek block, be curbed, and contain landscaped buffer planting.
- Prior to site work, an applicant must receive approval for grading and drainage plans, implement the approved erosion control plan, and install the limit of work.
- If stormwater management is required, a report based on Best Management Practice (BMP) must be submitted and must satisfy recommendations of the subwatershed study. Sites over 4 acres may need on-site quantity control. Disturbed areas must be rehabilitated and revegetated upon completion of the project.

12.6.3 Flood plain

To minimize the incidence of flood damage, the City has enacted special provisions of the Building Code, Zoning Ordinance, and Subdivision Regulations applying to all properties that lie within floodplain areas. If the property is in or near a floodplain area, the precise elevation of proposed development must be submitted on plans to the Department of Planning.

12.6.4 Critical Area Management Program (CAMP)

The State Chesapeake Bay Critical Area Protection Law requires all jurisdictions abutting the Chesapeake Bay, including Baltimore City, to designate all lands within 1,000 feet of the tidal water as Critical Areas and require environmental protection and mitigation for development in these areas. Planning staff will work with developers to apply Critical Area requirements.

12.6.5 Forest Conservation

- Development proposals that disturb 20,000 square feet of land or more, or subdivide a lot 20,000 square feet or more are regulated by the Forest Conservation Act. For these developments, the applicant must submit a Forest Stand Delineation (FSD) and Forest Conservation Plan (FCP) or Landscape Plan for the site. When a site is forested, the applicant may not come to the Site Plan Review Committee until the Department of Planning receives and approves the FSD. For information on the Baltimore City Forest Conservation Program call (410) 396-4369.
- Forested Sites: The applicant is required to submit a full Forest Stand Delineation (FSD) for the site that contains a detailed environmental assessment according to the guidelines found in the State of Maryland, Department of Natural Resources Forest Conservation Manual. The applicant will also be required to submit a Forest Conservation Plan (FCP), which may include preservation of existing trees and on-site or off-site planting.
- Non-Forested Sites: If no forests exist on the site, the applicant may provide a simplified FSD and Landscape Plan to meet the Forest Conservation requirements. Specimen trees located on these sites may also be required to be preserved.
- No permits for construction will be issued until the FSD and FCP are reviewed and approved.

12.6.6 Landscaping

- The landscape plan shall show proposed landscaping and all protected trees. Sites with existing trees to be saved will require a tree protection plan. A tree protection report from a certified arborist may also be required for trees to be saved. Use CAMP landscaping and mitigation standards for sites in the Critical Area.